THE IBIS.

NINTH SERIES.

No. XIV. APRIL 1910.

IX.—On the Birds of Northern Rhodesia and the Katanga District of Congoland.—Part II. By S. A. Neave, M.A., B.Sc. Oxon., F.Z.S., M.B.O.U.*

(Plate III. and Text-fig. 3.)

Fam. PRIONOPIDÆ.

257. PRIONOPS TALACOMA.

Prionops talacoma Smith; Neave, Memoirs & Proc. of the Manchester Lit. & Phil. Society, vol. 51, pt. iii. p. 70.

No. 78. 3. Near Kambove, 4000 ft., March 10, 1907.

Bill black; feet salmon-orange; iris and wattles bright sulphur-yellow.

This bird is common everywhere in the woodland in parties of six or seven.

258, SIGMODUS TRICOLOR.

Sigmodus tricolor (Gray); Neave, loc. cit. p. 71.

No. 93. 9 ad. Dikulwe R, 4000 ft., March 16, 1907.

Bill crimson-scarlet, distal half orange-yellow; feet scarlet; iris bright orange; wattle red.

No. 94. & juv. Dikulwe R., March 16, 1907.

Bill brownish orange, tinted with dusky at tip; feet orange; iris pale brown.

No. 614. J. Luwingu, N. of L. Bangweolo, July 19, 1908.

* Continued from p. 155.

Bill red, tipped with orange; feet orange-scarlet; iris orange; orbit red.

This species closely resembles *Prionops talacoma* in its habits, but is much less common.

Fam. LANIIDÆ.

259. LANIUS MINOR.

Lanius minor Gm.; Neave, loc. cit. p. 72.

No. 404. Lufupa R., 4000 ft., Oct. 16, 1907.

Bill black, greyish at base; feet black; iris dark brown.

This bird is to be seen every year, about October, in the more open parts of the country.

260. FISCUS COLLARIS.

Fiscus collaris (L.); Sharpe, Hand-l. Birds, iv. p. 284.

Lanius collaris Reich. Vög. Afr. ii. p. 607.

No. 244. J. Upper Lufira R., 3600 ft., June 20, 1907.

Bill and feet black; iris brown.

No. 704. d. Kalungwisi R., Sept. 8, 1908.

Bill and feet black; iris dark brown.

No. 767. Q. E. of L. Bangweolo, Oct. 12, 1908.

Bill and feet black; iris dark brown.

Not uncommon in the more open parts of the high plateau. It usually sits on the top of isolated bushes, and is rather wary and difficult to approach.

261. Enneoctonus collurio.

Enneoctonus collurio (L.); Neave, loc. cit. p. 72.

No. 411. & . Lufupa R., 4000 ft., Oct. 26, 1907.

Bill brownish horn-coloured, lower mandible whitish, tipped brown; feet dark olive-grey; iris brown.

No. 427. &? Lufupa R., 4000 ft., Oct. 31, 1907.

Bill black, base of lower mandible whitish; feet dusky; iris brown.

This bird appears simultaneously with Lanius minor and frequents the same open country.

262. Chlorophoneus nigrifrons.

Chlorophoneus nigrifrons Reich. Orn. MB. iv. p. 95 (1896); Vög. Afr. ii. p. 560.

No. 43. 9. Kambove, 4500 ft., Feb. 21, 1907.

Bill black; feet lead-coloured; iris red.

The only specimen seen. Shot in dense forest.

263. Chlorophoneus chrysogaster.

Chlorophoneus chrysogaster (Swains.); Neave, loc. cit. p. 73.

No. 44. 9. Kambove, 4500 ft., Feb. 21, 1907.

Bill black; feet lead-coloured; iris hazel.

No. 402. &. Near Lufupa R., 4000 ft., Oct. 14, 1907.

Bill black; feet dark slate-coloured; iris dark reddish brown.

No. 532. d. Chambezi R., May 11, 1908.

Bill black; feet blue-grey; iris purplish brown.

This bird is comparatively uncommon in the high plateau country, much more so in low ground such as in the Luangwa Valley. It is usually to be seen hunting for insects among the thickets on streams, banks, &c.

264. Dryoscopus cubla hamatus.

Dryoscopus cubla hamatus Reich,; Reich, Vög. Afr. ii. p. 594.

Dryoscopus hamatus Neave, loc. cit. p. 73.

No. 42. 3. Kambove, 4500 ft., Feb. 21, 1907.

Bill black; feet lead-coloured; iris red.

No. 167. 9. Lualaba R., 2500 ft., May 3, 1907.

Bill black; feet lead-coloured; iris orange-red.

No. 415. J. Lufupa R., 4000 ft., Oct. 28, 1907.

Bill black; feet dark slate-coloured; iris orange-red.

No. 461. Petauke, Luangwa Valley, 2400 ft., Jan. 10, 1908.

Bill dusky, greyish below; feet blue-grey; iris orange-scarlet.

No. 483. J. Upper Luangwa Valley, 2500 ft., March 16, 1908.

Bill black; feet lead-coloured; iris red.

Everywhere a common bird, occurring in every "bird-party," less often singly.

265. DRYOSCOPUS MOSSAMBICUS.

Dryoscopus mossambicus Fischer & Reichen.; Neave, loc. cit. p. 74.

No. 79. 8. Near Kambove, 4000 ft., March 11, 1907.

Bill black; feet lead-coloured; iris brown.

No. 314. J. Bunkeya R., 3000 ft., Aug. 8, 1907.

Bill black; feet dark slate-coloured; iris dark brc

No. 529. 3. Chambezi R., May 8, 1908.

Bill black; feet greenish grey; iris reddish brown.

A common bird in thickets &c. on stream-banks, but much more often heard than seen.

266. NICATOR CHLORIS.

Nicator chloris (Linn.); Reich. loc. cit. ii. p. 554.

Nos. 168, 169. \eth & \circlearrowleft . Lualaba R , 2500 ft., May 4, 1907.

Bill black; feet dusky grey; iris brown.

I only met with this pair of birds, which were in some dense bush. They appeared to have considerable variety of notes, uttering at one time a highly ventriloquial clucking sound, at others an apparently scornful laughing note.

267. Pomatorhynchus senegalus.

Pomatorhynchus senegalus (L.); Neave, loc. cit. p. 75.

No. 2. 3. Near Kapopo, Upper Kafue, 4000 ft., Jan. 10, 1907.

Bill black; feet greyish; iris purplish grey.

No. 84. J. Dikulwe R., 4000 ft., March 15, 1907.

Bill black; feet pale bluish grey; iris violet.

No. 801. 9. Valley of Mansya R., Mpika Plateau, Oct. 29, 1908.

Bill black; feet pale grey; iris violet.

Not uncommon in pairs throughout the woodland country.

268. Pomatorhynchus australis congener.

Pomatorhynchus australis congener Reich. J. f. O. 1902, p. 258; loc. cit. ii. p. 546.

No. 117. 9. Dikulwe R., 4000 ft., March 28, 1907.

Bill black; feet pale blue-grey; iris reddish brown.

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No. 200. 9. Upper Lualaba, 3500 ft., May 21, 1907.

Bill black; feet pale bluish grey; iris brownish purple.

This bird resembles the preceding in its habits, but is much less common.

269. Pomatorhynchus anchietæ.

Pomatorhynchus anchietæ (Bocage); Reich. loc. cit. ii. p. 553.

No. 35. 9. Kambove, 4500 ft., Feb. 16, 1907.

Bill dusky horn-coloured, greyish below; feet olive-slate-coloured; iris olive-brown.

No. 54. & breeding. Kambove, Feb. 23, 1907.

Bill black; feet dusky grey; iris amethyst-pink.

No. 55. & imm. Kambove, Feb. 23, 1907.

Bill brownish horn-coloured, paler below; feet dark grey; iris pinkish brown.

No. 393. & ad. Lufupa R., 4000 ft., Oct. 12, 1907.

Bill black; feet greenish grey; iris salmon-pink.

This bird differs somewhat in its habits from other species of the genus. It usually frequents long grass on the edges of patches of forest. It utters from time to time a few notes of a singularly sweet tone.

270. NILAUS NIGRITEMPORALIS.

Nilaus nigritemporalis Reich.; Neave, loc. cit. p. 76.

No. 516. &. Chambezi Valley, 4000 ft., May 1, 1908.

Bill black; base of lower mandible blue-grey; feet olive-grey; iris dark brown.

This seems a rare bird. The few individuals that I have seen formed members of a "bird-party," and were silently hunting through the trees for insects.

Fam. PARIDÆ.

271. PARUS NIGER.

Parus niger Vieill.; Neave, loc. cit. p. 76.

No. 484. 3. Upper Luangwa Valley, 2500 ft., March 17, 1908.

Bill and feet black; iris dark brown.

No. 485. &. Upper Luangwa Valley, March 27, 1908.

Bill and feet bluish slate-coloured; iris dark brown.

This bird is common in the Luangwa Valley. It appears to be replaced on the High Plateau west of the Mchinga Escarpment by *P. insignis*.

272. PARUS INSIGNIS.

Parus insignis Cab.; Sharpe, Hand-l. Birds, iv. p. 331.

Parus niger insignis Reich. loc. cit. iii. p. 512.

No. 13. &. Kambove, 4500 ft., Feb. 9, 1907.

Bill and feet black; iris very dark brown.

No. 403. d. Lufupa R., 4000 ft., Oct. 14, 1907.

Bill and feet black; iris dark brown.

No. 722. 3. Kalungwisi R., Sept. 14, 1908.

Bill and feet black; iris brown.

This species is not uncommon on the High Plateau. It is not so frequently seen forming one of a "bird-party" as most of its allies.

273. PARUS RUFIVENTRIS.

Parus rufiventris Boc.; Reich. loc. cit. iii. p. 514.

Parus masukuensis Neave, loc. cit. p. 76.

No. 119. d. Dikulwe R., 3500 ft., March 28, 1907.

Bill black; feet bluish slate-coloured; iris grey.

No. 386. J. Lulua Post, Upper Lufupa R., 4500 ft., Oct. 5, 1907.

Bill black; feet lead-coloured; iris sulphur-yellow.

No. 420. 9. Lufupa R., 4000 ft., Oct. 30, 1907.

Bill black; feet bluish grey; iris dark olive-grey.

No. 526. d. Chambezi R., 4000 ft., May 7, 1908.

Bill black; feet bluish grey; iris pale yellow, outwardly brownish.

This bird is not at all uncommon. I once met with a family of five individuals, but it more usually occurs singly or in pairs forming members of a "bird-party."

274. PARUS PARVIROSTRIS.

Parus parvirostris Shell.; Neave, loc. cit. p. 77.

No. 29. 3. Kambove, 4000 ft., Feb. 14, 1907.

Bill black; feet leaden grey; iris dark brown.

No. 545. Q. Upper Luansenshi R., north-east of Lake Bangweolo, June 2, 1908.

Bill black; feet bluish slate-coloured; iris brown.

275. Anthoscopus parvulus.

Anthoscopus parvulus Heugl.; Reich. loc. cit. iii. p. 528.

No. 641. &. Lofu R., Tanganyika Plateau, Aug. 6, 1908.

Bill greyish horn-coloured; feet dark slate-coloured; iris brown.

I met with a small party of these birds on one occasion only. They were hunting for insects through the woodland in company with some White-eyes.

Fam. CERTHIDÆ.

276. SALPORNIS SALVADORII.

Salpornis salvadorii (Boc.); Reich. loc. cit. iii. p. 507.

No. 5. 2, not breeding. Kansanshi, N.W. Rhodesia, 4500 ft., Jan. 28, 1907.

Bill dusky horn-coloured, paler below; feet dusky brown; iris dark brown.

No. 21. & ad. Kambove, 4500 ft., Feb. 11, 1907.

Bill dusky, paler below; feet dark brownish; iris dusky brown.

No. 199. \(\partial \text{ ad.} \) Upper Lualaba R., 3500 ft., May 21, 1907.

Bill brownish horn-coloured, paler below; feet brown; iris brown.

This bird is by no means uncommon in the woodland of High Plateau country. Singly or in pairs, it almost invariably forms one of a bird-party. It creeps actively about the trunks, searching for insects in the bark. It has a flight rather like that of a Woodpecker.

Fam. Zosteropidæ.

277. Zosterops anderssoni.

Zosterops anderssoni Shell.; Neave, loc. cit. p. 77.

No. 8. 9. Kansanshi to Kambove, Feb. 1, 1907.

Bill blackish, base of lower mandible paler; feet pale slate-coloured; iris red-brown.

No. 564. 3. Luwingu, June 10, 1908.

Bill dusky, base of lower mandible bluish grey; feet pale grey; iris brown.

No. 520. 9. Chambezi R., May 5, 1908.

Bill dusky, base of lower mandible bluish grey; feet bluish slate-coloured; iris brown.

No. 683. 3. Lofu Valley, Aug. 26, 1908.

Bill black, base of lower mandible bluish grey; feet pale grey; iris brown.

278. Zosterops virens.

Zosterops virens Sundev.; Reich. loc. cit. iii. p. 430.

No. 344. 9. Bunkeya, 3000 ft., Aug. 31, 1907.

Bill dusky, base of lower mandible paler; feet grey; iris yellow-brown.

No. 432. 9. Lufupa R., 3500 ft., Nov. 4, 1907.

Bill black, base of lower mandible grey; feet silver-grey; tarsi olive-grey; iris brown.

No. 677. J. Kamboe, S. of Lake Tanganyika, Aug. 21, 1908.

Bill black; feet bluish grey; iris brown.

Fam. Nectariniidæ.

279. CINNYRIS CUPREUS.

Cinnyris cupreus (Shaw); Neave, loc. cit. p. 77.

No. 370. 3 juv. Plateau between Dikulwe and Lualaba R., 4000 ft., Sept. 24, 1907.

Bill black; feet black; iris dark brown.

No. 392. & juv. Lufupa R., 4000 ft., Oct. 11, 1907.

Bill black; feet black; iris dark brown.

No. 398. & ad. Lufupa R., Oct. 12, 1907.

Bill black; feet black; iris dark brown.

No. 799. d ad. Mpika Plateau, Oct. 27, 1908.

Bill and feet black; iris dark brown.

This is one of the most frequent of the larger Sun-birds. As is the case with other Sun-birds, I think that there can be

no doubt that this bird, having once acquired its breedingplumage, never again loses it, and that birds in partial breeding-plumage are merely immature.

280. CINNYRIS MICRORHYNCHUS.

Cinnyris microrhynchus Shell.; Neave, loc. cit. p. 78.

No. 226. 3 juv. Upper Lufira R., 3500 ft., June 12, 1907.

Bill and feet black; iris dark brown.

281. CINNYRIS LEUCOGASTER.

Cinnyris leucogaster Vieill.; Neave, loc. cit. p. 79.

I only met with this species in the Luangwa Valley.

282. CINNYRIS FALKENSTEINI.

Cinnyris falkensteini Fischer & Reich.; Neave, loc. cit. p. 79.

No. 60. & ad. Kambove, 4500 ft., Feb. 25, 1907.

Bill and feet black; iris dark brown.

No. 275. & ad. Kambove, July 9, 1907.

Bill and feet black; iris dark brown.

No. 493. & ad. Chambezi Valley, 4000 ft., April 12, 1908.

Bill and feet black; iris dark brown.

No. 599. & ad. Chirui Isl., L. Bangweolo, July 5, 1908.

Nos. 654, 656. & & & . Lofu R., Aug. 10, 12, 1908.

Bill and feet black; iris dark brown.

No. 676. d. Lofu R., Aug. 17, 1908.

Bill and feet black; iris dark brown.

No. 763. 9. E. of L. Bangweolo, Oct. 9, 1908.

Bill and feet black; iris dark brown.

A common High Plateau species.

283. CINNYRIS LUDOVICENSIS.

Cinnyris ludovicensis (Bocage); Reich. loc. cit. iii. p. 489.

No. 219. 3 ad. Upper Lualaba R., 3800 ft., May 30, 1907.

Bill black; feet black; iris dark brown.

No. 224. ♀. Upper Lualaba R., May 31, 1907.

Bill and feet black; iris dark brown.

No. 804. J. Lake Young, Oct. 31, 1908.

Bill and feet black; iris brown.

A rather scarce species, only met with in woodland.

284. CHALCOMITRA GUTTURALIS.

Chalcomitra gutturalis (L.); Neave, loc. cit. p. 79.

No. 218. J. Upper Lualaba, 3600 ft., May 30, 1907.

Bill black; feet black; iris dark brown.

This bird, though not rare, is less common in the High Plateau than in the Luangwa Valley, where it is abundant. It is a very pugnacious bird, and I have frequently seen it bullying smaller species, such as *Anthothreptes hypodila*.

285. CHALCOMITRA DEMINUTA.

Chalcomitra deminuta Cab.; Neave, loc. cit. p. 80.

No. 41. &. Kambove, 4500 ft., Feb. 20, 1907.

Bill black; feet black; iris dark brown.

No. 123. &. Dikulwe R., 4000 ft., March 30, 1907.

Bill black; feet black; iris dark brown.

No. 164. & imm. Lualaba R., 2500 ft., May 2, 1907.

Bill black; feet black; iris dark brown.

No. 261. &. Kambove, 4500 ft., July 1, 1907.

Bill black; feet black; iris dark brown.

No. 533. & juv. Chambezi R., May 12, 1908.

Bill and feet black; iris dark brown.

Nos. 610, 623. 9 3. Luwingu, July 17, 22, 1908.

Bill and feet black; iris brown.

No. 626. 2. Upper Kalungwisi, July 27, 1908.

Bill and feet black; iris dark brown.

No. 658. & juv. Lofu R., Aug. 10, 1908.

Bill and feet black; iris brown.

Nos. 693, 697. ♂♀ ad. Kalungwisi Valley, Sept. 4, 5, 1908.

Bill and feet black; iris dark brown.

286. CHALCOMITRA KIRKI.

Chalcomitra kirki (Shell.); Sharpe, Hand-l. Birds, v. p. 51.

No. 322. &. Bunkeya R., 3000 ft., Aug. 14, 1907.

Bill black; feet black; iris dusky.

No. 469. 2. Luangwa Valley, 2000 ft., Feb. 26, 1908.

Bill and feet black; iris dark brown.

No. 753. & juv. Luwingu, Sept. 26, 1908.

Bill and feet black; iris dark brown.

287. CHALCOMITRA OBSCURA.

Chalcomitra obscura (Jard.); Neave, loc. cit. p. 80.

No. 382. J. Upper Lufupa R., 4000 ft., Oct. 2, 1907.

Bill black, basal third of lower mandible brownish yellow; feet dark brown; iris dark brown.

No. 431. J. Lufupa R., 3500 ft., Nov. 3, 1907.

Bill black, yellowish gape; feet black; iris dark brown.

Nos. 651, 655, 669. 3 3 3. Lofu R., Aug. 9, 10, 15, 1908.

Bill and feet black; iris dark brown.

This is another forest-species, frequently found in company with C. verticalis.

288. Cyanomitra verticalis.

Cyanomitra verticalis (Lath.); Sharpe, Hand-l. Birds, v. p. 54.

No. 368. 3. Plateau between Dikulwe and Lualaba, 4000 ft., Sept. 24, 1907.

Bill black; feet black; iris dull reddish brown.

No. 379. 3. Upper Lufupa R., 4000 ft., Oct. 2, 1907.

Bill black; feet black; iris dull reddish brown.

No. 559. d. Luwingu, June 9, 1908.

Bill and feet black; iris dark brown.

No. 616. 3. Luwingu, July 19, 1908.

Bill and feet black; iris brown.

No. 624. 9. Chimpili Hills, July 25, 1908.

Bill and feet black; iris brown.

No. 552. & juv. Luwingu, June 8, 1908.

Bill dusky, gape yellow; feet black; iris dark brown.

No. 634. 9. Mporokoso, July 31, 1908.

Bill and feet black; iris dark brown.

No. 824. 9. Mansya R., L. Young, Nov. 5, 1908.

Bill and feet black; iris dark brown.

This is essentially a forest-species, being not uncommon in "Msitu." It does not, so far as I know, occur east of the Mchinga Escarpment. It has a curious mewing note, constantly repeated.

289. Anthothreptes longuemarii.

Anthothreptes longuemarei (Less.); Neave, loc. cit. p. 81.

No. 155. &. S. Kaluli R., Lualaba R., 2500 ft., April 27, 1907.

Bill dusky brown; feet black; iris dark brown.

No. 399. J. Lufupa R., 4000 ft., Oct. 13, 1907.

Bill black; feet black; iris dark brown.

No. 513. J. Champezi Valley, 4000 ft., April 30, 1908.

Bill black; feet black; iris dark brown.

No. 561. d. Luwingu, June 9, 1908.

Bill dusky; feet black; iris dark brown.

This bird occurs sparingly throughout the High Plateau country. It is usually in small parties.

290. Anthothreptes hypodila.

Anthothreptes hypodila (Jard.); Neave, loc. cit. p. 81.

No. 225. Q. Kambove, 4000 ft., June 10, 1907.

Bill black; feet black; iris dark brown.

No. 631. d. Upper Kalungwisi R., July 29, 1908.

Bill and feet black; iris dark brown.

Nos. 674, 675. 3 9. Lofu R., Aug. 17, 1908.

Bill and feet black; iris dark brown.

No. 682. J. Lofu R., Aug. 24, 1908.

Bill and feet black; iris dark brown.

Common everywhere, especially in low-lying river-valleys.

291. Anthothreptes anchietæ.

Anthothreptes anchietæ (Bocage); Reich. loc. cit. iii. p. 442.

No. 492. \eth . Chambezi Valley, 4000 ft., April 11, 1908.

Bill black; feet black; iris dark brown.

No. 494. d. Chambezi Valley, April 12, 1908.

Bill black; feet black; iris dark brown.

No. 524. ?. Chambezi R., May 6, 1908.

Bill black; feet black; iris dark brown.

This bird occurs sparingly in pairs or small parties throughout the High Plateau. I also saw an individual on my first expedition in November, 1905, in the Southern Serenje district.

Fam. MOTACILLIDÆ.

292. MOTACILLA VIDUA.

Motacilla vidua Sundev.; Neave, loc. cit. p. 82.

No. 248. J. Upper Lufira R., 3500 ft., June 21, 1907.

Bill black; feet black; iris dark brown.

Ubiquitous and very tame.

293. MOTACILLA CLARA.

Motacilla clara Sharpe, Hand-l. Birds, v. p. 140.

Motacilla longicauda Reich. loc. cit. iii. p. 301.

No. 428. 9. Lufupa R., 3500 ft., Nov. 1, 1907.

Bill black; feet pale pinkish grey; iris brown.

Only observed in the rocky bed of a small tributary of the Lufupa R. It seems rather a shy bird.

294. MOTACILLA CAMPESTRIS.

Motacilla campestris Pall.; Neave, loc. cit. p. 82.

Ray's Wagtail occurs during the rainy season in the Luangwa Valley. I did not observe it on the High Plateau, west of the Mchinga Escarpment.

295. Motacilla flava.

Motacilla flava L.; Sharpe, Hand-l. Birds, v. p. 142.

Budytes flavus Reich. loc. cit. p. 303.

No. 594. d. L. Bangweolo, July 5, 1908.

Bill and feet black; iris brown.

296. Motacilla Borealis.

Motacilla borealis Sundev.; Sharpe, Hand-l. Birds, v. p. 143.

Budytes borealis Reich. loc. cit. iii. p. 304.

No. 149. &. Mazanguli, Lualaba Valley, 2700 ft., April 23, 1907.

Bill black, lower mandible white, tipped with black; feet dusky; iris brown.

297. Anthus trivialis.

Anthus trivialis (L.); Reich. loc. cit. iii. p. 311.

No. 38. 9. Kambove, 4500 ft., Feb. 17, 1907.

Bill dusky brown, whitish below; feet pinkish brown; iris brown.

No. 68. 3. Kambove, 4500 ft., Feb. 28, 1907.

Bill dark brown, paler below; feet pale pinkish brown; iris brown.

No. 454. d. Serenje, N.E. Rhodesia, Dec. 20, 1907.

Bill brown, below brownish flesh-coloured, tipped brown; feet pale brownish flesh-coloured; iris brown.

Not uncommon in the rainy season.

298. Anthus Leucophrys.

Anthus leucophrys Vieill.; Neave, loc. cit. p. 83.

No. 205. S. Upper Lualaba R., 3500 ft., May 22, 1907.

Bill brownish horn-coloured; lower mandible yellow.

No. 323. &. Bunkeya R., 3000 ft., Aug. 15, 1907.

Bill brown, lower mandible yellow, tipped with brown; gape yellow; feet pale yellowish; iris brown.

No. 324. 9. Bunkeya R., Aug. 15, 1907.

Bill brown, lower mandible yellow, tipped with brown; gape yellow; legs pale yellowish, feet darker; iris brown.

No. 400. J. Lufupa R., 4000 ft., Oct. 13, 1907.

Bill horn-brown, paler below; feet pale brownish, tarsi paler; iris dark brown.

No. 401. 9. Lufupa R., Oct. 13, 1907.

Bill horn-brown, paler below.

No. 525. 9. Chambezi R., 4000 ft., May 6, 1908.

Bill horn-brown, base of lower mandible yellow; feet yellowish brown, tarsi paler; iris brown.

No. 541. 9. Luena, E. of L. Bangweolo, May 28, 1908.

Bill brown, base of lower mandible and gape yellow; feet brownish yellow; tarsi yellow; iris brown.

A common species everywhere in the open country.

299. Anthus nicholsoni.

Anthus nicholsoni Sharpe; Neave, loc. cit. p. 83.

The range of this bird does not appear to extend north of the Congo-Zambezi watershed—on the western side, at least.

300. Anthus rufulus.

Anthus rufulus Vieill.; Sharpe, Hand-l. Birds, v. p. 148.

No. 141. 3. High Plateau between Dikulwe and Lualaba, 5500 ft., April 11, 1907.

Bill dusky brown, pinkish tipped with dusky below.

No. 434. d. Ruwe, 4500 ft., Nov. 7, 1907.

Bill brownish horn-coloured; feet dull orange-yellow; iris brown.

No. 586. 9. Chishi Island, L. Bangweolo, June 24, 1908. Bill horn-brown, basal half of lower mandible pinkish; feet pale pinkish brown; iris brown.

No. 710. &. Kalungwisi R., Sept. 9, 1908.

Bill dark brownish above, yellow tipped with brown below; feet dirty yellow, tarsi paler; iris dark brown.

No. 820. & juv. Mansya R., L. Young, Nov. 8, 1908.

Bill brownish horn-coloured, paler below; feet brownish flesh-coloured; iris brown.

This bird is not specially confined to open country, as it perches a good deal on trees, and I have seen individuals in comparatively dense woodland.

301. Macronyx ascensi.

Macronyx ascensi Salvad.; Sharpe, Hand-l. Birds, v. p. 153. No. 188. 3. Upper Lualaba R., 3400 ft., May 16, 1907.

Bill dark brown; lower mandible bluish horn-coloured, tipped with dusky; feet and legs reddish brown; iris dark brown.

No. 549. d. Upper Luansenshi R., L. Bangweolo, June 3, 1908.

Bill: upper mandible and tip of lower mandible black, rest of lower mandible bluish grey; feet pale yellowish brown; iris brown.

Not uncommon in pairs throughout the more open parts of the High Plateau.

302. Macronyx wintoni.

Macronyx wintoni Sharpe; Reich. loc. cit. iii. p. 325.

No. 701. 9. Kalungwisi R., 4000 ft., Sept. 7, 1908.

Bill brownish horn-coloured, lower mandible whitish; feet and tarsi brownish flesh-coloured; iris brown.

Nos. 733, 734. ♀ ♂. Chisinga Plateau, Kalungwisi district, 4200 ft., Sept. 19, 1908.

Bill brownish horn-coloured, gape and lower mandible whitish; feet pale pinkish brown; iris dark brown.

Nos. 741, 742, 743. ♂♀♀. Chisinga Plateau, Sept. 20, 1908.

Bill brownish horn-coloured, paler below; feet pale brownish; iris dark brown.

No. 805. J. Near L. Young, Mansya R., Nov. 1, 1908.

Bill brownish horn-coloured, paler below; feet brown; iris brown.

I found this beautiful Long-claw not uncommon on the large open plains near L. Mweru and again near L. Young. It never seems to perch on trees as *M. ascensi* does.

Fam. ALAUDIDÆ.

303. TEPHROCORYS CINEREA.

Tephrocorys cinerea (Gm.); Sharpe, Hand-I. Birds, v. p. 164.

Calandrella cinerea Reich. loc. cit. iii. p. 377.

No. 202. 3. Upper Lualaba, 3500 ft., May 21, 1907.

Bill dusky brown, pinkish at base of lower mandible; feet brown; iris brown.

No. 206. 9. Upper Lualaba, May 22, 1907.

Bill yellowish brown, lower mandible yellow, darker tip; feet pale reddish brown; iris brown.

No. 373. δ . Plateau between Dikulwe and Lualaba Rivers, 4000 ft.

Bill, tip dusky, base pale whitish; feet greyish flesh-coloured; tarsi flesh-coloured; iris brown.

I found this Lark in large flocks on the Upper Lualaba, but did not meet with it elsewhere.

304. MIRAFRA FISCHERI.

Mirafra fischeri (Reich.); Reich. loc. cit. iii. p. 339.

No. 531. J. Chambezi R., May 11, 1908.

Bill blackish above, whitish below; feet and tarsi flesh-coloured; iris golden brown.

No. 535. 3. Chambezi R., May 11, 1908.

Bill brownish horn-coloured above, whitish below; feet pale flesh-coloured; iris brown.

I met with this bird sparingly on open spaces on the Upper Chambezi River, but did not observe it elsewhere.

305. MIRAFRA NIGRICANS.

Mirafra nigricans (Sundev.); Neave, loc. cit. p. 84.

No. 174. &. Busanga, Lualaba R., 2800 ft., May 9, 1907.

Bill dusky brown, whitish at base of lower mandible; feet pale yellowish brown; iris dark brown.

No. 412. & juv. Lufupa R., Oct. 26, 1907.

Bill dusky, gape cream-coloured; feet pale flesh-coloured; iris olive-grey.

The last specimen is only placed provisionally under this name. In size and general configuration it appears to be the young of this species, but the primaries are heavily marked with rufous.

Fam. FRINGILLIDÆ.

306. Petronia petronella.

Petronia petronella Licht.; Neave, loc. cit. p. 84.

No. 112. 9. Dikulwe R., 5000 ft., March 24, 1907.

Bill brownish horn-coloured, paler below; feet grey; iris brown.

No. 241. Upper Lufira R., 3600 ft., June 18, 1907.

Bill brownish horn-coloured, paler below; feet greyish brown; iris brown.

No. 270. &. Near Kambove, 4000 ft., July 4, 1907.

Bill brownish horn-coloured, paler below; feet dull grey; iris brown.

No. 388. ?. Lulua Post, W. Lualaba district, 4000 ft., Oct. 7, 1907.

Bill brownish horn-coloured, paler below; feet greenish grey; iris brown.

No. 468. Juv. Luangwa Valley, 2000 ft., Feb. 26, 1908.

Bill brownish horn-coloured, paler below; feet dark grey; iris brown.

No. 746. d. Machinga Plateau, Kalungwisi District, Sept. 22, 1908.

Bill brownish horn-coloured, paler below; feet dark greyish brown; iris brown.

No. 792. &. Lower Chambezi Valley, Oct. 25, 1908.

Bill brownish horn-coloured, paler below; feet dusky grey; iris brown.

Almost ubiquitous in woodland, especially common in hilly districts.

307. Passer diffusus.

Passer diffusus (Smith); Reich. loc. cit. p. 230.

No. 130. d. Dikulwe R., 4000 ft., April 1, 1907.

Bill black; feet pale brownish; iris chestnut-brown.

No. 235. d. Upper Lufira R., 3500 ft., June 15, 1907.

Bill black; feet pale brownish; iris yellow-brown.

No. 478. 2. Upper Luangwa R., 2000 ft., March 11, 1908.

Bill black; feet pale yellowish brown; iris dark brown.

No. 482. d. Upper Luangwa R., March 14, 1908.

Bill black; feet olive-yellow; iris dark brown.

308. Poliospiza melanochroa.

Poliospiza melanochroa Reich.; Neave, loc. cit. p. 86.

No. 242. &. Upper Lufira R., 3600 ft., June 19, 1907.

Bill brownish horn-coloured, paler below; feet dusky brown; iris reddish brown.

This seems a scarce bird, perhaps partly from being so inconspicuous. It seems commonest in woodland country.

309. Poliospiza gularis.

Poliospiza gularis (A. Smith); Reich. loc. cit. iii. p. 258.

No. 67. d. Kambove, 4500 ft., Feb. 28, 1907.

Bill horn-brown; feet horn-brown; iris brown.

310. Poliospiza angolensis.

Poliospiza angolensis (Gm.); Reich. loc. cit. iii. p. 253.

No. 208. J. Upper Lualaba R., 3500 ft., May 23, 1907.

Bill dusky brown, lower mandible much paler; feet reddish brown; iris brown.

311. SERINUS SHARPII.

Serinus sharpei O. Neum.; Reich. loc. cit. iii. p. 266.

No. 40. & ad. Kambove, Feb. 17, 1907.

Bill brownish horn-coloured, paler below; feet dusky; iris brown.

No. 376. 2 ad. Lufupa R., Oct. 1, 1907.

Bill yellowish horn-coloured; feet brown; iris brown.

Nos. 568, 569. & J. Luena, June 17, 18, 1908.

Bill brownish horn-coloured, yellowish below; feet dark brown; iris brown.

No. 811. 9. Mansya R., near L. Young, Nov. 1, 1908.

Bill brownish yellow, lower mandible pale yellow; feet brown; iris brown.

I found this bird widely but locally distributed.

312. SERINUS ICTERUS.

Serinus icterus (Vieill.); Neave, loc. cit. p. 85.

No. 83. d. Dikulwe R., 4000 ft., March 15, 1907.

Bill horn-brown; feet greyish brown; iris brown.

No. 349. 9. Bunkeya R., 3000 ft., Aug. 31, 1907.

Bill brownish horn-coloured, slightly paler below; feet brown; iris brown.

No. 546, 547. ♂♀. Upper Luansenshi R., June 3, 1908.

Bill brownish horn-coloured, paler below; feet greyish brown; iris brown.

No. 579. 2 juv. N. shore of L. Bangweolo, June 22, 1908.

Bill brownish horn-coloured; feet dusky; iris reddish brown.

No. 649. J. Lofu R., Tanganyika Plateau, Aug. 8, 1908.

Bill brownish horn-coloured; feet greyish brown; iris brown.

No. 771. 9. East of L. Bangweolo, Oct. 15, 1908.

Bill brownish horn-coloured; feet and iris dark brown.

Occurs everywhere and is much the commonest species of the genus in this region.

313. SERINUS CAPISTRATUS.

Serinus capistratus Finsch; Reich. loc. cit. iii. p. 273.

No. 64. J. Kambove, 4500 ft., Feb. 28, 1907.

Bill horn-coloured, paler below; feet pinkish brown; iris brown.

No. 245. 3 juv. Upper Lufira R., 3500 ft., June 21, 1907.

Bill brownish horn-coloured, paler below; feet reddish brown; iris dark brown.

No. 351. 3. Bunkeya R., 3000 ft., Sept. 1, 1907.

Bill pinkish white; feet pale brown; iris brown.

Not uncommon in Katanga. I did not observe it in N.E. Rhodesia.

314. Emberiza major.

Emberiza major (Boc.); Reich. loc. cit. iii. p. 284.

No. 63. &? Kambove, 4500 ft., Feb. 27, 1907.

Bill horn-brown, paler below; feet pinkish; iris brown.

No. 74. 9. Kambove, March 4, 1907.

Bill horn-brown, lower mandible flesh-coloured, tipped with horn-colour; feet greyish flesh-coloured; iris brown.

No. 135. & imm. Dikulwe R., April 2, 1907.

Bill horn-brown, paler below; feet pinkish grey; iris dark brown.

No. 210. 9. Upper Lualaba R., May 23, 1907.

Bill dusky brown, lower mandible pinkish, tipped with dusky; feet pale brownish; iris brown.

Not uncommon in Katanga; never met with in Northern Rhodesia.

315. Emberiza flaviventris.

Emberiza flaviventris (Vieill.); Neave, loc. cit. p. 86.

No. 184. d. Lualaba R., 3500 ft., May 14, 1907.

Bill dusky brown, lower mandible pink, tipped with dusky; feet pinkish brown; iris brown.

No. 455. & juv. Serenje, 4500 ft., Dec. 1907.

Bill blackish, brown below; feet very pale grey; iris brown.

No. 563. ? Luwingu, June 10, 1908.

Bill dusky, pinkish below; feet greyish flesh-coloured; iris brown.

No. 695. 2. Kalungwisi Valley, Sept. 4, 1908.

Bill brownish horn-coloured, base of lower mandible pinkish; feet brownish horn-coloured; iris brown.

This little species is ubiquitous. It usually inhabits the woodland and feeds on the ground.

316. FRINGILLARIA TAHAPISI.

Fringillaria tahapisi (Smith); Reich. loc. cit. iii. p. 289.

No. 176. d. Lualaba R., 3500 ft., May 10, 1907.

Bill above dusky brown, below bright yellow; feet yellow-brown, tarsi paler; iris dark brown.

No. 374. Upper Lualaba R., 4000 ft., Sept. 26, 1907.

Bill brownish horn-coloured, base of lower mandible yellowish; feet brown, tarsi paler; iris dark brown.

No. 515. Chambezi Valley, 4000 ft., May 1, 1908.

Bill brown above, yellowish below; feet brownish, tarsi paler; iris dark brown.

No. 622. & juv. Luwingu, July 22, 1908.

Bill dusky, paler below; feet pale greyish brown; iris dark brown.

The Rock-Bunting is not uncommon, especially on wooded hill-sides. It usually selects the top of a tree from which to give forth its broken song. I have also found it rather shy.

Fam. PLOCEIDÆ.

317. VIDUA SERENA.

Vidua serena (L.); Neave, loc. cit. p. 87.

No. 191. & juv. Upper Lualaba R., May 17, 1907.

Bill coral-red; feet dark brown; iris dark brown.

No. 464. & ad. Lusangazi R., Luangwa Valley, Jan. 16, 1908.

Bill coral-pink; feet dark brown; iris dark brown.

No. 511. & juv. Chambezi Valley, April 23, 1908.

Bill black, gape white; feet dusky; iris dark brown.

318. Steganura paradisea.

Steganura paradisea (L.); Neave, loc. cit. p. 87.

No. 152, 183. & in summer. Lualaba R., 2500-3500 ft., April and May 1907.

Bill black; feet dark brown; iris dark brown.

No. 189. & in winter. Upper Lualaba R., 3500 ft., May 16, 1907.

Bill brownish horn-coloured; feet greyish brown; iris dark brown.

No. 232. 3 in winter. Upper Lufira R., 3500 ft., June 13, 1907.

Bill dusky; feet dark brown; iris dark brown.

A very dark specimen.

No. 607. & juv. Luena, July 14, 1908.

Bill dark brown; feet greyish brown; iris brown.

319. Penthetria ardens.

Penthetria ardens (Bodd.); Neave, loc. cit. p. 87.

No. 71. & in summer. Kambove, 4500 ft., March 1, 1907.

Bill black; feet black; iris dusky.

No. 124. \$\chi\$ in summer. Dikulwe R., 4000 ft., March 30, 1907.

Bill brownish horn-coloured, paler below; feet pinkish brown; iris brown.

No. 136. & in summer. Dikulwe R., April 2, 1907.

Bill black; feet dusky; iris brown.

No. 254. 9 in winter. Upper Lufira R., 3500 ft., June 25, 1907.

Bill brownish horn-coloured, paler below; feet pinkish brown; iris brown.

This bird is widely distributed, though not usually very common. I have more than once seen the males assist a host of insectivorous birds in reducing the numbers of swarming termites.

320. PENTHETRIA HARTLAUBI.

Penthetria hartlaubi Bocage; Neave, loc. cit. p. 88.

No. 371. & in winter. Upper Lualaba R., 4000 ft., Sept. 24, 1907.

Bill, upper mandible brownish horn-coloured; feet dark brown; iris dark brown.

No. 449. & in summer. Near Serenje, N.E. R., 4500 ft., Dec. 18, 1907.

Bill black, edges of both mandibles bluish white; feet black; iris dark brown.

No. 453. $\$ in summer. Near Serenje, N.E. R., Dec. 20, 1907.

Bill pale brownish horn-coloured, slightly paler below; feet pale brownish; iris brown.

No. 512. & in summer. Chambezi Valley, 3500 ft., April 25, 1908.

Bill black, lower mandible bluish white; feet very dark brown; iris dusky.

No. 571. &, winter. Luena, N.E. L. Bangweolo, June 17, 1908.

Bill brownish horn-coloured above, blue-grey below; feet dusky; iris brown.

No. 575, 576. 9 9, winter. Luena, June 18, 1908.

Bill pinkish brown, paler below; feet pale greyish horn-coloured; iris dark brown.

Nos. 612, 613. 3 3 in winter. Luwingu, July 17, 1908. Bill brownish horn-coloured; feet and iris brown.

No. 706. 3, intermediate. Kalungwisi R., Sept. 9, 1908. Bill brownish horn-coloured, paler below; feet and iris

Bill brownish horn-coloured, paler below; feet and iris brown.

Nos. 754, 755. & &, intermediate. Near Luena, Oct. 3, 1908.

Bill dusky above, bluish white below; feet and iris dark brown.

This handsome Widow-bird is not uncommon on grassy plains and swamps on the High Plateau. The males are very tame, but the females, especially at the breeding-season, are very shy and difficult to obtain.

321. PENTHETRIA ALBONOTATA.

Penthetria albonotata (Cass.); Reich. loc. cit. iii. p. 146.

No. 458. & in summer. Petauke, 2400 ft., Jan. 8, 1908.

Bill pale bluish white; feet dusky brown; iris dark brown.

No. 466. & in summer. Rukususi R., Upper Luangwa Valley, 3000 ft., Feb. 17, 1908.

Bill blue-grey; feet black; iris dark brown.

No. 628. 3 in winter. Upper Kalungwisi R., July 27, 1908.

Bill brownish horn-coloured, paler below; feet pale brown; iris brown.

This bird is more widely distributed than either *P. hart-laubi* or *Urobrachya bocagii*, and differs from those species in occurring in the Luangwa Valley.

322. PENTHETRIOPSIS MACRURA.

Penthetriopsis macroura (Gm.).

Coliuspasser macroura Reich. loc. cit. iii. p. 138.

No. 85. 3 in summer. Dikulwe R., 3500 ft., March 15, 1907.

Bill black, lower mandible tipped with greyish horn-colour; feet black; iris dark brown.

No. 86. 9 in summer. Dikulwe R., March 15, 1907.

Bill brownish horn-coloured, paler below; feet pinkish brown; iris dark brown.

No. 87. & in summer. Dikulwe R., March 15, 1907.

Bill black, lower mandible tipped with bluish horn-colour; feet black; iris dark brown.

No. 215. 3 in summer. Upper Lualaba R., May 28, 1907.

Bill black, lower mandible tipped with greyish horn-colour; feet black; iris dark brown.

This bird was only met with in the Kambove district and to the west of it. I never saw it in Northern Rhodesia.

323. Urobrachya bocagii.

Urobrachya bocagei Sharpe; Reich. loc. cit. iii. p. 133.

No. 500. ♀ in summer. Nashinga swamp, Chambezi Valley, 4000 ft., April 16, 1908.

Bill brownish horn-coloured, paler below; feet pinkish horn-coloured; iris brown.

No. 505. & in summer. Nashinga swamp, Chambezi Valley, April 17, 1908.

Bill bluish white; feet dusky brown; iris dark brown.

No. 506. & in summer. Nashinga swamp, Chambezi Valley, April 18, 1908.

Bill pale bluish white; feet black; iris dark brown.

No. 711. & in winter. Kalungwisi R., Sept. 9, 1909.

Bill bluish grey, brownish around nostrils; feet and iris brown.

Nos. 794, 796. 2 2 in winter. Lower Chambezi Valley, Oct. 26, 1908.

Bill brownish horn-coloured, paler below; feet and iris brown.

I found this rare Widow-bird not uncommon in swamps in the High Plateau country, in the more northern portion of N.E. Rhodesia. It frequently lives among reeds and swamp-grasses at a very considerable distance from dry land.

324. Pyromelana flammiceps.

Pyromelana flammiceps (Swains.); Neave, loc. cit. p. 88.

No. 88. & in summer. Dikulwe R., 4000 ft., March 15, 1907.

Bill black; feet brown; iris dark brown.

No. 89. 9 in summer. Dikulwe R., 4000 ft., March 15, 1907.

Bill brownish horn-coloured, paler below; feet pinkish brown; iris brown.

325. Pyromelana nigrifrons.

Pyromelana nigrifrons Böhm; Neave, loc. cit. p. 89.

No. 465. 3 in summer. Near Ft. Jameson, Jan. 18, 1908.

Bill black; feet brownish pink; iris dark brown.

326. Pyromelana xanthomelæna.

Pyromelana xanthomelæna Sharpe; Neave, loc. cit. p. 89. No. 489. & in summer. Upper Luangwa Valley, 3000 ft., March 29, 1908.

Bill, upper mandible black, lower white; feet dull brownish; iris dark brown.

327. Pyromelana taha.

Pyromelana taha (Smith); Reich. loc. cit. iii. p. 114.

No. 312. 2 ad. Bunkeya R., 3000 ft., Aug. 8, 1907.

Bill brownish horn-coloured, paler below; feet pale brown; iris brown.

328. PLOCEIPASSER PECTORALIS.

Ploceipasser pectoralis (Peters); Neave, loc. cit. p. 90.

No. 473. ? in summer. \ Lundazi R., Upper Luangwa Val-

No. 474. 3 in summer. I ley, 2000 ft., March 4, 1908.

Bill black; feet greyish brown; iris reddish brown.

This bird, so far as my experience goes, is rigidly confined to "Mopane" forest in the Luangwa Valley. It is a gregarious and extremely noisy bird, building a very untidy grassnest, which is usually placed at the tip of a branch of Mimosa.

329. Quelea Lathami.

Quelea lathami (Smith); Neave, loc. cit. p. 90.

330. Quelea cardinalis.

Quelia cardinalis (Hartl.); Neave, loc. cit. p. 91.

No. 487. & in summer. Upper Luangwa Valley, 3000 ft., March 29, 1908.

Bill black; feet brownish flesh-coloured; iris dark brown.

331. Spermestes scutatus.

Spermestes scutatus Heugl.; Neave, loc. cit. p. 91.

No. 131. Dikulwe R., 4000 ft., April 1, 1907.

Bill black, lower mandible bluish white; feet dusky; iris brown.

No. 255. d. Upper Lufira R., 3500 ft., June 25, 1907.

Bill black, lower mandible whitish tipped with grey; feet dusky; iris dark brown.

Nos. 256, 257. Imm. \Im \circ . Upper Lufira R., June 25, 1907.



West, Newman imp.

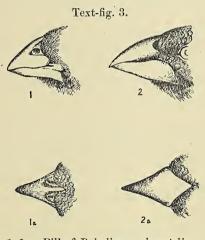
Bill dusky brown, slightly paler below; feet dusky brown; iris dark brown.

Nos. 751, 752. ♂♀. Luwingu, edge of Chimpili Plateau, Sept. 26, 1908.

Bill dusky, bluish white below; feet dusky; iris dark brown.

PALUDIPASSER Neave.

This new genus most nearly resembles Spermestes, but differs chiefly in the character of the bill, which is much shorter and more slender. The basal part of the culmen is laterally compressed, forming a distinct keel, and, when viewed from above, the nasal openings are exposed and conspicuous and much more approximate than in Spermestes. The lower mandible has a distinct angle near the distal extremity, much as in Emberiza.



1, 1 a. Bill of Paludipasser locustella. 2, 2 a. , Spermestes scutatus.

Scale of figures $\frac{9}{1}$.

332. PALUDIPASSER LOCUSTELLA. (Plate III.)

Paludipasser locustella Neave, Bull. B. O. C. xxv. p. 25.

Nos. 542, 543. 3 juv. Upper Luansenshi R., N.E. of
L. Bangweolo, 4000 ft., June 1, 1908.

Bill dusky, gape pink; feet pale brownish; iris brown.

This extraordinary little bird inhabits a peculiar type of marsh common in the neighbourhood of Lake Bangweolo and well described by Livingstone as "sponges." These areas are covered with fine wiry matted grasses to the depth of some two feet. It is in this matted grass that P. locustella lives in small flocks. Its flight is weak, seldom extending more than a few yards, and reminded me of that of a locust.

333. Amauresthes fringilloides.

Amauresthes fringilloides (Lafr.); Neave, loc. cit. p. 92.

No. 178. &. Lualaba R., 3000 ft., May 10, 1907.

Bill black, lower mandible blue-grey tipped dusky; feet dusky grey; iris dark brown.

334. LAGONOSTICTA NIVEIGUTTATA.

Lagonosticta niveiguttata (Peters); Neave, loc. cit. p. 92.

No. 345. 3. Bunkeya R., 3000 ft., Aug. 31, 1907.

Bill black, base of lower mandible blue-grey; feet grey-brown; iris brown; orbit blue.

This is not a High Plateau species, but frequents the low-lying river-valleys in both the Congo and Zambezi basins. It is usually to be found among the thickets on the edge of forest, and is rather shy.

335. LAGONOSTICTA BRUNNEICEPS.

Lagonosticta brunneiceps Sharpe; Neave, loc. cit. p. 93.

No. 459. & ad. Petauke, Luangwa Valley, 2400 ft., Jan. 8, 1908.

Bill pink, culmen dusky; feet pale brownish flesh-coloured; iris brown; orbit pale yellow.

I only met with this species in the Luangwa Valley. It seems to be replaced in the High Plateau by the larger L. hæmatocephala.

336. LAGONOSTICTA HARTERTI.

Lagonosticta harterti Shelley; Sharpe, Hand-l. Birds, v. p. 430.

Lagonosticta nitidula Hartl.; Reich. loc. cit. iii. p. 195. No. 198. 3. Upper Lualaba R., 3500 ft., May 20, 1907. Bill mauve-pink, culmen and gonys dusky; feet dusky brown; iris dark brown.

No. 292. Bunkeya R., 3000 ft., July 27, 1907.

Bill pinkish, culmen and gonys dusky; feet dusky brown; iris dusky brown.

No. 293. &. Bunkeya R., 3000 ft., July 27, 1907.

Bill pinkish, culmen and gonys dusky; feet dusky brown; iris dark brown.

No. 583. &. Chishi Island, L. Bangweolo, June 24, 1908.

Bill dusky purple, reddish purple below; feet dark brown; iris brown.

This is rather a shy bird, haunting thickets &c. much in the way of L. niveiguttata.

337. LAGONOSTICTA HÆMATOCEPHALA.

Lagonosticta hæmatocephala Neum.; Sharpe, Hand-l. Birds, v. p. 431.

No. 128. J. Dikulwe R., 4000 ft., April 1, 1907.

Bill bluish horn-coloured, tipped with dusky; feet greyish purple; iris brown, orbit pink.

No. 148. J. Kaluli R., 3000 ft., April 20, 1907.

Bill bluish dusky, lower mandible blue-grey tipped with dusky; feet dusky grey; iris dark brown; orbit red.

No. 274. 2. Kambove, 4500 ft., July 9, 1907.

Bill dusky grey, slightly paler below; feet grey-brown; iris dark brown.

No. 588. 2. Chishi Island, L. Bangweolo, June 26, 1908.

Bill dusky purplish; feet dark grey; iris dark brown.

No. 730. J. Kalungwisi R., Sept. 16, 1908.

Bill dusky bluish; feet dark grey; iris brown.

No. 749. 3? Edge of Chimpili Plateau, Luwingu, Sept. 24, 1908.

Bill dusky bluish; feet brown; iris dark brown, orbit pale bluish.

A common and tame species, often seen feeding on bare spots in native villages &c. with Estrilda angolensis.

338. LAGONOSTICTA RHODOPARIA.

Lagonosticta rhodoparia Heugl.; Neave, loc. cit. p. 93.

339. Hypochæra codringtoni.

Hypochæra codringtoni Neave, loc. cit. p. 94.

340. Pytelia Afra.

Pytelia afra (Gm.); Reich. loc. cit. iii. p. 162.

No. 258. 9. Upper Lufira R., 3600 ft., June 26, 1907.

Bill dark brown, paler below; feet greyish brown; iris reddish brown.

No. 268. 3. Near Kambove, 4000 ft., July 4, 1907.

Bill red, base of upper mandible dusky; feet light brown; iris red.

No. 560. ♀. Luwingu, edge of Chimpili Plateau, June 9, 1908.

Bill brownish horn-coloured; feet pale pinkish brown; iris reddish brown.

No. 608. 2 juv. Near Luena, July 15, 1908.

Bill dark brown; feet brownish flesh-coloured; iris reddish brown.

This bird is usually found in pairs, feeding on the ground in woodland country.

341. Hypochæra funerea.

Hypochæra funerea (de Tarrag.); Reich. loc. cit. iii. p. 215. No. 127. 3 ad. Dikulwe R., 4000 ft., April 1, 1907. Bill white; feet pale flesh-coloured; iris dark brown. No. 129. 3 juv. Dikulwe R., 4000 ft., April 1, 1907. Bill whitish; feet flesh-coloured; iris brown.

342. Sporæginthus subflavus.

Sporæginthus subflavus (Vieill.); Neave, loc. cit. p. 94.

I found this bird sparingly over a wide area. A specimen shot on the Upper Lualaba R., May 16, 1907, was too much damaged to be worth skinning.

343. Estrilda astrilda.

Estrilda astrilda (L.); Neave, loc. cit. p. 94.

344. Estrilda angolensis.

Estrilda angolensis (L.); Neave, loc. cit. p. 95.

No. 308. 9? Bunkeya R., 3000 ft., Aug. 4, 1907.

Bill amethyst-pink, tipped and edged with dusky; feet pale brown; iris red-brown.

No. 355. 3. Bunkeya R., 3000 ft., Sept. 2, 1907.

Bill lilac-pink, tipped with dusky; feet greyish flesh-coloured; iris brown.

This little bird is ubiquitous over a wide area and is extremely tame. It is almost domesticated in the villages, obtaining most of its food from the refuse of the native grain.

345. Estrilda phænicotis.

Uræginthus phænicotis (Swains.); Sharpe, Hand-l. Birds, v. p. 456.

Uræginthus bengalus (L.); Reich. loc. cit. iii. p. 207.

Nos. 663, 664. \circlearrowleft ? . Lofu Valley, L. Tanganyika, Aug. 14, 1908.

Bill pinkish lilac, tip and culmen dusky; feet pale brownish; iris reddish brown.

This bird appears to replace *E. angolensis* in the Lower Lofu Valley, S. of L. Tanganyika. I did not meet with it elsewhere.

346. Estrilda minor.

Estrilda minor (Cab.); Reich. loc. cit. iii. p. 180.

No. 311. ? Bunkeya R., 3000 ft., Aug. 7, 1907.

Bill red; feet dark brown; iris brown.

347. Estrilda benguellensis.

Estrilda benguellensis Neum. Bull. B. O. C. xxi. p. 96 (1908).

No. 193. & ad. Upper Lualaba R., 3500 ft., May 18, 1907.

Bill crimson; feet dark brown; iris red.

No. 243. 9 ad. Upper Lufira R., 3500 ft., June 19, 1907.

Bill coral-red; feet dusky brown; iris red.

No. 629. 9. Upper Kalungwisi R., July 29, 1908.

Bill coral-red; feet dusky; iris orange-red.

I found this recently described species in several places, It was always in large flocks, and frequented the reeds and long grasses on river-banks in open parts of the country.

348. ESTRILDA PERREINI.

Estrilda perreini (Vieill.); Reich. loc. cit. iii. p. 193.

No. 185. 3. Lualaba R., 3500 ft., May 14, 1907.

Bill bluish grey, tipped with dusky; feet black; iris redbrown.

No. 375. 9. Lufupa R., 4000 ft., Oct. 1, 1907.

Bill blue-grey, upper mandible tipped and edged with black; feet black; iris dark brown.

No. 397. 9. Lufupa R., 4000 ft., Oct. 12, 1907.

Bill blue-grey, upper mandible tipped and edged with dusky; feet black; iris dark brown.

Only met with at Kambove and to the west of it.

349. Anaplectes rubriceps.

Anaplectes rubriceps (Sund.); Neave, loc. cit. p. 96. Confined to the Luangwa Valley, where it is common.

350. Anaplectes melanotis.

Anaplectes melanotis (Lafr.); Reich. loc. cit. iii. p. 26. No. 387. J. Upper Lufupa R., 4500 ft., Oct. 7, 1907.

Bill orange; feet pinkish brown; iris reddish brown.

No. 544. & juv. Upper Luansenshi R., N. of L. Bangweolo, June 2, 1908.

Bill salmon-orange; feet pinkish brown; iris reddish brown.

This bird seems to replace A. rubriceps west of the Mchinga Escarpment. It is, however, much scarcer, and always seems to form one of a "bird-party": it is the only member of the Ploceidæ that I have observed to do so.

351. Sycobrotus bicolor.

Sycobrotus bicolor (Vieill.); Reich. loc. cit. iii. p. 34. No. 166. 3 ad. Lualaba R., 2500 ft., May 3, 1907.

Bill blue-grey, distal half of upper mandible dusky; feet pinkish; iris red.

No. 343. &. Bunkeya R., 3000 ft., Aug. 31, 1907.

Bill bluish grey, tip of upper mandible dusky; feet pinkish grey; iris red.

No. 346. &. Bunkeya R., 3000 ft., Aug. 31, 1907.

Bill whitish, tip of upper mandible and nostrils dusky; feet pinkish grey; iris reddish brown.

No. 680. J. Lofu Valley, Aug. 24, 1908.

Bill blue-grey, tip of culmen dusky; feet pinkish grey; iris dull red.

This is essentially a dense forest species. It is rather shy and has an extremely harsh jarring note. I only met with it within the Congo Basin.

352. SITAGRA CROCATA.

Sitagra crocata (Hartl.); Neave, loc. cit. p. 96.

No. 30. & juv. Kambove, 4500 ft., Feb. 14, 1907.

Bill brownish horn-coloured, whitish below; feet dull greyish; iris dark brown.

No. 197. 3 ad. Upper Lualaba R., 3500 ft., May 20, 1907.

Bill black; feet dull greyish; iris pale sulphur-yellow.

No. 262. 9 ad. Kambove, 4500 ft., July 1, 1907.

Bill black, tip of lower mandible whitish; feet grey; iris grey.

No. 332. & ad. Bunkeya R., 3000 ft., Aug. 21, 1907.

Bill black; feet grey; iris pale olive-brown.

No. 357. & ad. Bunkeya R., 3000 ft., Sept. 5, 1907.

Bill black; feet grey; iris pale yellow.

This bird is common, but is not very often seen, as it usually skulks among the thickets on river-banks.

353. Amblyospiza albifrons.

Amblyospiza albifrons (Vigors); Reich. loc. cit. iii. p. 98. I did not obtain this species myself, but saw some living specimens which had been obtained in the neighbourhood of Ft. Jameson.

354. Hyphantornis nigriceps.

Hyphantornis nigriceps Layard; Neave, loc. cit. p. 98.

No. 140. &. Dikulwe R., 4000 ft., April 4, 1907.

Bill black; feet brownish; iris orange-scarlet.

No. 192. $\, \circ$. Upper Lualaba R., 3500 ft., May 17, 1907.

Bill brownish horn-coloured, paler below; feet brownish flesh-coloured; iris dark brown.

No. 321. & ad. Bunkeya R., 3000 ft., Aug. 13, 1907.

Bill black; feet horn-brown; iris red.

No. 589. $\, \, \, \, \, \, \, \, \,$ Chishi Island, L. Bangweolo, June 28, 1908.

Bill brownish horn-coloured, paler below; feet brownish pink; iris scarlet.

No. 718. 9. Kalungwisi R., Sept. 11, 1908.

Bill brownish horn-coloured; feet pale brownish; iris reddish orange.

A common and universally distributed species, which nests in large colonies in reeds on river-banks or on trees which overhang the water.

355. Hyphantornis cabanisi.

Hyphantornis cabanisi Peters; Reich. loc. cit. iii. p. 73.

No. 151. &. Mazanguli, mid-Lualaba Valley, April 24, 1907.

Bill black; feet silver-grey; iris pale sulphur-yellow.

356. Hyphantornis shelleyi.

Hyphantornis shelleyi Sharpe; Neave, loc. cit. p. 98.

No. 457. & ad. (summer). Petauke, Jan. 5, 1908.

Bill black; feet reddish flesh-coloured; iris orange-red.

Not met with out of the Luangwa Valley, where it is local. It is usually found in colonies, and nests in Mimosa-trees. It is one of those Weavers which associate their nests with those of the ferocious wasps of the genus *Polistes*.

357. Hyphantornis vitellina.

Hyphantornis vitellina (Licht.); Reich. loc. cit. iii. p. 81.

Nos. 595, 596. ♂♀. L. Bangweolo, July 5, 1908.

Bill brownish horn-coloured, paler below; feet brown; iris— \mathcal{J} scarlet, \mathcal{I} brown.

No. 783. Q. E. of L. Bangweolo, Oct. 20, 1908.

Bill brownish horn-coloured, paler below; feet brown; iris dark brown.

I attribute these examples with some doubt to this species, as they are more brightly coloured, especially as regards their bright yellowish-green rumps. They may possibly represent a new race of *vitellina*, but as all the specimens are in winter plumage it is impossible to decide this point at present. These birds were found haunting the large reed-covered lagoons on Lake Bangweolo, often at considerable distances from dry land. Their yellowish-green rumps were very conspicuous on the wing.

358. HYPHANTORNIS XANTHOPS.

Hyphantornis xanthops Hartl.; Neave, loc. cit. p. 97.

No. 17. &. Kambove, 4500 ft., March 2, 1907.

Bill black; feet dull pinkish; iris butter-coloured.

No. 354. 9. Bunkeya R., 3000 ft., Sept. 1, 1907.

Bill brownish horn-coloured, paler below; feet brown; iris olive-yellow.

No. 358. J. Bunkeya R., 3000 ft., Sept. 7, 1907.

Bill black; feet brownish flesh-coloured; iris pale sulphur-yellow.

Nos. 573, 574. 33. Luena, N. L. Bangweolo, June 18, 1908.

Bill brownish horn-coloured, paler below; feet brown; iris hazel.

No. 582. &. Chishi Island, L. Bangweolo, June 23, 1908.

Bill and feet brownish horn-coloured; iris golden yellow.

359. Hyphantornis galbula.

Hyphantornis galbula (Rüpp.)?; Neave, loc. cit. p. 97.

Fam. ORIOLIDÆ.

360. ORIOLUS NOTATUS.

Oriolus notatus Peters; Neave, loc. cit. p. 99.

No. 154. of juv. Kaluli R., Lualaba Valley, 3000 ft., April 27, 1907.

Bill dark reddish; feet grey; iris red-brown.

Andersson's Oriole is not uncommon in river-valleys, but rare in the High Plateau country.

361. Oriolus larvatus.

Oriolus larvatus Licht.; Neave, loc. cit. p. 99.

No. 90. Dikulwe R., 4000 ft., March 16, 1907.

Bill dull pinkish; feet dusky; iris blood-red.

No. 636. &. Mporokoso, July 31, 1908.

Bill reddish brown; feet dark grey; iris red.

The Black-headed Oriole is ubiquitous.

Fam. DICRURIDÆ.

362. Dicrurus ludwigii.

Dicrurus ludwigii Smith; Neave, loc. cit. p. 100.

No. 31. Kambove, 4500 ft., Feb. 14, 1907.

Bill black; feet black; iris yellow-brown.

No. 672. d. Lofu R., L. Tanganyika, Aug. 16, 1908.

Bill and feet black; iris orange-red.

No. 713. Kalungwisi Valley, Sept. 10, 1908.

Bill and feet black; iris orange-red.

This bird, which is easily distinguished by its orange-red iris, has much the same habits as its larger relative, but seldom if ever ventures out of the dense bush on the banks of streams &c. It is specially common in "Msitu."

363. Dicrurus afer.

Dicrurus afer (Licht.); Neave, loc. cit. p. 100.

The common Drongo is ubiquitous.

Fam. Eulabetidæ.

364. Lamprotornis mevesi.

Lamprotornis mevesi (Wahlb.); Neave, loc. cit. p. 101.

No. 475. 3. Lundazi R., Upper Luangwa Valley, 2000 ft. March 4, 1908.

Bill and feet black; iris dark brown.

This seems to be one of the birds peculiar to Mopane Forest in the Luangwa Valley, where it is common. I never met with it elsewhere.

365. Cinnyricinclus verreauxi.

Cinnyricinclus verreauxi (Boc.); Neave, loc. cit. p. 101.

No. 383. J. Upper Lufupa R., 4000 ft., Oct. 3, 1907.

Bill and feet black; iris sulphur-yellow.

No. 436. 9. S.E Katanga, 4000 ft., Nov. 26, 1907.

Bill black, gape yellow; feet dusky; iris sulphur-yellow.

The latter specimen, though an undoubted female, has a trace of the male's purple colour on the secondaries.

This is a migratory bird which seems to be present in the country only from September to March or April.

366. CREATOPHORA CARUNCULATA.

Creatophora carunculata (Gm.); Sharpe, Hand-1. Birds, v. p. 517.

Perissornis carunculatus Reich. loc. cit. ii. p. 670.

No. 201. 9. Upper Lualaba, 3500 ft., May 21, 1907.

Bill flesh-coloured; feet dirty flesh-coloured; iris brown; bare skin on sides of face yellow.

No. 584. ?. Chishi Island, L. Bangweolo, June 24, 1908.

Bill flesh-coloured, dusky over nostrils; feet brownish grey; iris dark brown; bare skin behind the eye pale yellow.

367. Lamprocolius splendidus glaucovirens.

Lamprocolius glaucovirens (Elliot); Neave, loc. cit. p. 102. No. 684. ♀. Lofu Valley, Tanganyika Plateau, Aug. 26, 1908.

Bill and feet black; iris creamy white.

Nos. 688, 691, & &. Lofu Valley, Tanganyika Plateau, Aug. 26, 27, 1908.

Bill and feet black; iris creamy white.

No. 717. 3. Kalungwisi Valley, Sept. 10, 1908.

Bill and feet black; iris creamy white.

No. 807. Juv. Near L. Young, Nov. 1, 1908.

Bill dusky, the gape yellow; feet dusky; iris brownish.

This young bird has the whole of the under surface of a chestnut-brown colour.

This handsome Starling appears to be migratory and to visit this part of Africa from October onwards. It is not present in the country during the dry season. It is usually to be found on fruit-trees in "Msitu."

368. Lamprocolius sycobius.

Lamprocolius sycobius Hartl.; Neave, loc. cit. p. 102.

No. 144. Kaluli R., Lualaba Valley, 3000 ft., April 18, 1907.

Bill and feet black; iris red.

No. 145. J. Kaluli R., April 18, 1907.

Bill and feet black; iris sulphur-yellow.

Nos. 263, 264. 9 9. Kambove, 4500 ft., July 2, 1907.

Bill and feet black; iris orange-yellow.

No. 269. Kambove, 4500 ft., July 4, 1907.

Bill and feet black; iris vermilion.

No. 488. $\mbox{\ensuremath{?}}$. Upper Luangwa Valley, 2000 ft., March 29, 1908.

Bill and feet black; iris orange.

No. 577. &. Luena, N.E. of L. Bangweolo, June 28, 1908.

Bill and feet black; iris orange.

Fam. Corvidæ.

369. Corvultur albicollis.

Corvultur albicollis (Lath.); Neave, loc. cit. p. 103.

This Crow occurs over a wide area, but is nowhere very common. It frequents hilly country and is usually seen in pairs.

370. Corvus scapulatus.

Corvus scapulatus Daud.; Neave, loc. cit. p. 103.

This bird is very local, and seems, where it does occur, to be more than half domesticated, as I have never seen it away from the outskirts of native villages. It is enormously abundant in the villages on the shores and islands of Lake Bangweolo. It is extremely tame, and may be seen perched on the roofs of the huts or on the ground within a few feet of natives.